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D. Chen, J. Chen and D. Sarid, Si–C_{60}–Si(111)-(7×7) interactions: a scanning tunneling microscopy study 321 (1994) 190

H.W. Yeom, T. Abukawa, Y. Takakuwa, M. Nakamura, M. Kimura, A. Kakizaki and S. Kono, Surface electronic structure of single-domain Si(001)2×2-Al: an angle-resolved photoelectron spectroscopy study using synchrotron radiation 321 (1994) L177

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A. Nishiyama, G. ter Horst, M. Lohmeier, A.M. Molenbroek and J.W.M. Frenken, Structure analysis of HF-treated Si(111):H surface with medium-energy ion scattering 321 (1994) 261

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J.G. Chen, C.M. Kim, B. Frühberger, B.D. DeVries and M.S. Touvelle, A NEXAFS determination of the oxidation state of vanadium carbide on V(110): observation of charge transfer from vanadium to carbon 321 (1994) 145

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Tellurides

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M. Sambi, L. Zaratin, G. Granozzi, G.A. Rizzi, E. Tondello and A. Santaniello, Angle-scanned photoelectron diffraction chemisorption study of c(2 × 2)-O on Ni(1 ML)/Cu(100) 321 (1994) L214

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  - ☐ *Photon stimulated desorption (PSD)*
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Materials index

ELEMENTAL AND CHEMICAL IDENTITY
(Include each component of an interface or multilayer structure as a separate category. Add your own specific elemental or chemical label if a suitable entry is not on the list.)

Elements

- ☐ Alkali metals
- ☐ Alkaline earth metals
- ☐ Aluminum
- ☐ Antimony
- ☐ Arsenic
- ☐ Bismuth
- ☐ Boron
- ☐ Bromine
- ☐ Cadmium
- ☐ Carbon
- ☐ Cerium
- ☐ Chalcogens
- ☐ Chlorine
- ☐ Chromium
- ☐ Cobalt
- ☐ Copper
- ☐ Diamond
- ☐ Gallium
- ☐ Germanium
- ☐ Gold
- ☐ Graphite
- ☐ Hafnium
- ☐ Hydrogen
- ☐ Indium
- ☐ Iodine
- ☐ Iridium
- ☐ Iron
- ☐ Lanthanides
- ☐ Lead
- ☐ Manganese
- ☐ Mercury
- ☐ Molybdenum
- ☐ Nickel
- ☐ Niobium
- ☐ Nitrogen
- ☐ Noble gases
- ☐ Osmium
- ☐ Palladium
- ☐ Phosphorus
- ☐ Platinum
- ☐ Rhenium
- ☐ Rhodium
- ☐ Ruthenium
- ☐ Scandium
- ☐ Silicon
- ☐ Silver
- ☐ Tantalum
- ☐ Technetium
- ☐ Thallium
- ☐ Thorium
- ☐ Tin
- ☐ Titanium
- ☐ Tungsten
- ☐ Uranium
- ☐ Vanadium
- ☐ Ytterbium
- ☐ Yttrium
- ☐ Zinc
- ☐ Zirconium
- ☐ Other .....*

Compounds (non-molecular solids)

- ☐ Alkali halides
- ☐ Alloys
- ☐ Aluminum oxide
- ☐ Barium oxide
- ☐ Biological compounds
- ☐ Borides
- ☐ Boron nitride
- ☐ Cadmium selenide
- ☐ Cadmium sulphide
- ☐ Cadmium telluride
- ☐ Carbides
- ☐ Cobalt oxides
- ☐ Copper oxides
- ☐ Gallium antimonide
- ☐ Gallium arsenide
- ☐ Gallium nitride
- ☐ Gallium phosphide
- ☐ Gallium selenide
- ☐ Halides
- ☐ Hydrides
- ☐ Indium antimonide
- ☐ Indium arsenide
- ☐ Indium oxides
- ☐ Indium phosphide
- ☐ Inorganic compounds
- ☐ Iron oxide
- ☐ Lead telluride
- ☐ Magnesium oxides
- ☐ Mercury telluride
- ☐ Mica
- ☐ Molybdenum oxides
- ☐ Nickel carbide
- ☐ Nickel oxides
- ☐ Nickel sulphide
- ☐ Nitrides
- ☐ Silicides
- ☐ Silicon carbide
- ☐ Silicon–germanium
- ☐ Silicon nitride
- ☐ Silicon oxides
- ☐ Steel
- ☐ Sulphides
- ☐ Tin oxides
- ☐ Tin telluride
- ☐ Titanium carbide
- ☐ Titanium oxide
- ☐ Tungsten oxide
- ☐ Uranium oxide
- ☐ Vanadium oxide
- ☐ Zeolites
- ☐ Zinc oxide
- ☐ Zinc selenide
- ☐ Other .....*

Molecules

- ☐ Alcohols
- ☐ Aldehydes
- ☐ Alkanes
- ☐ Alkenes
- ☐ Alkynes
- ☐ Ammonia
- ☐ Aromatics
- ☐ Biological molecules – nucleic acids
- ☐ Biological molecules – proteins
- ☐ Biological molecules – other .....*
- ☐ Carbon dioxide
- ☐ Carbon monoxide
- ☐ Carboxylic acid
- ☐ Cyanogen
- ☐ Deuterium
- ☐ Esters
- ☐ Ethers
- ☐ Fullerenes
- ☐ Halogens
- ☐ Hydrogen
- ☐ Hydrogen cyanide
- ☐ Hydrogen sulphide
- ☐ Ketones
- ☐ Nitrogen
- ☐ Nitrogen oxides
- ☐ Oxygen
- ☐ Ozone
- ☐ Phosphine
- ☐ Silane
- ☐ Sulphur dioxide
- ☐ Sulphur hexafluoride
- ☐ Water
- ☐ Other .....

PHYSICAL STATE

Surfaces

- ☐ Amorphous surfaces
- ☐ Dendritic and/or fractile surfaces
- ☐ Glass surfaces
- ☐ Liquid surfaces
- ☐ Polycrystalline surfaces

- ☐ Single crystal surfaces
  - ☐ *Low index single crystal surfaces*
  - ☐ *Stepped single crystal surfaces*
  - ☐ *Vicinal single crystal surfaces*
- ☐ Surface defects
- ☐ Whiskers

Interfaces
- ☐ Crystalline–amorphous interfaces
- ☐ Crystalline–glass interfaces
- ☐ Grain boundaries
- ☐ Liquid–gas interfaces
- ☐ Single crystal epitaxy
- ☐ Solid–liquid interfaces
- ☐ Solid–gas interfaces

Heterostructures
- ☐ Heterojunctions
- ☐ Quantum wells
- ☐ Superlattices

Non-epitaxial thin film structures
- ☐ Amorphous thin films
- ☐ Ceramic thin films
- ☐ Glassy thin films
- ☐ Polycrystalline thin films

☐ **Adatoms**

☐ **Clusters**

Particulate composites
- ☐ Blacks
- ☐ Ceramics
- ☐ Powders

☐ **Coatings**

☐ **Porous solids**

ELECTRICAL AND MAGNETIC BEHAVIOR

Surfaces and/or films
- ☐ Insulating films
- ☐ Insulating surfaces
- ☐ Magnetic films
- ☐ Magnetic surfaces
- ☐ Metallic films
- ☐ Metallic surfaces
- ☐ Semiconducting films
- ☐ Semiconducting surfaces
- ☐ Superconducting films
- ☐ Superconducting surfaces

Interfaces
- ☐ Magnetic interfaces
- ☐ Metal–electrolyte interfaces
- ☐ Metal–insulator interfaces
- ☐ Metal–metal interfaces
- ☐ Metal–semiconductor interfaces
- ☐ Schottky barrier
- ☐ Semiconductor–electrolyte interfaces
- ☐ Semiconductor–insulator interfaces
- ☐ Semiconductor–semiconductor interfaces
- ☐ Semiconductor–superconductor interfaces
- ☐ Other interfaces .....*

Heterostructures and thin film structures
- ☐ Metal–metal magnetic heterostructures
- ☐ Metal–metal magnetic thin film structures
- ☐ Metal–metal nonmagnetic heterostructures
- ☐ Metal–metal nonmagnetic thin film structures
- ☐ Metal–oxide–semiconductor (MOS) structures
- ☐ Metal–semiconductor magnetic heterostructures
- ☐ Metal–semiconductor magnetic thin film structures
- ☐ Metal–semiconductor nonmagnetic heterostructures
- ☐ Metal–semiconductor nonmagnetic thin film structures
- ☐ Semiconductor–semiconductor heterostructures
- ☐ Semiconductor–semiconductor thin film structures
- ☐ Superconductor–semiconductor heterostructures
- ☐ Superconductor–semiconductor thin film structures
- ☐ Other heterostructures .....*
- ☐ Other thin film structures .....*

☐ **Contacts**

*Please, fill in necessary new Materials Index Keyword. If the new keyword is indicated on the manuscript, please, make clear to which subcategory it belongs.